DOCUMENT RESUME

ED 056 792 24 RC 005 690

AUTHOR Thornburg, Hershel D.
TITLE An Investigation of Attitudes Among Potential Dropouts from Minority Groups During Their Freshman Year in High School. Final Report.
INSTITUTION Arizona Univ., Tucson.
SPONS AGENCY National Center for Educational Research and Development (DHEW/CE), Washington, D.C.
BUREAU NO BR-0-I-111
PUB DATE Sep 71
CONTRACT OEC-9-71-0002(057)
NOTE 40p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Anglo Americans; Cultural Factors; *Dropout Attitudes; *Grade 9; *Minority Groups; Questionnaires; Research; *Self Concept; Sex Differences; Social Factors; *Student Characteristics; Team Teaching

ABSTRACT

Because of high dropout rates and high minority concentrations within the Casa Grande, Arizona, Union High School District, a new program assigned to hold students in school and to shift their attitudes toward school and self was incepted during the 1968-69 academic year. The program focused on giving special consideration to core courses, English and math, in a team-teaching situation. The 43 ninth-graders selected to participate in the program represented their ethnic groups as follows: (a) Anglo, 30.6%; (b) Mexican American, 39.4%; (c) American Indian, 18.1%; and (d) Black, 11.9%. In respect to the first objective, 6.9% of these students dropped out of school compared to 18% of the vocationally placed students and 8.1% of the regular classroom students; absenteeism rate for the special academic group was 4.5%, compared with 9.5% among the vocational students and 4% among the regular academic students. On an "attitudes toward school" scale on a pre-test basis, the special academic students had a mean of 76.3, compared to 75.9 for vocational students and 78.2 for regular classroom students. When given an alternate-form "attitudes toward school" scale as a post-test, the special students' mean was 77.4, compared to 74.3 for vocational students and 75.1 for regular classroom students. Covariance analysis indicates that the produced change in attitudes toward school was significant beyond the .01 level. The obtained F, with degrees of freedom 2 and 281, was 5.0. This indicates that differential change in attitudes did occur. (Author/LS)

ED056792

BR 0-I-111
OE-NCERD
RC

FINAL REPORT

Project No. 0-I-111
Contract No. OEC-9-71-0002(057)

An Investigation of Attitudes among Potential Dropouts from Minority Groups during their Freshman Year in High School

Hershel D. Thornburg
Department of Educational Psychology
University of Arizona
Tucson, Arizona 85721

September, 1971

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

RC005690

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

RECEIVED
DEC 6 1971
NMSU
E.R.I.C.

FINAL REPORT

Project No. O-I-111
Contract No. OEC-9-71-0002(057)

An Investigation of Attitudes among Potential Dropouts from Minority Groups during their Freshman Year in High School

Hershel D. Thornburg

Department of Educational Psychology
University of Arizona

Tucson, Arizona 85721

September, 1971

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

TABLE OF CONTENTS

		Page
	SUMMARY	1
I.	BACKGROUND OF STUDY	2
	Purpose	2
	Research Significance	3
	Hypotheses	4
	Related Literature	5
	Characteristics of the Dropout	6
	Attitudes toward School	7
	Sociocultural Factors in Self-Concept	8
	Sociocultural Factors in Attitudes toward School	9
	Self-Concept and the Dropout	9
	Rsearch with the Pupil Opinion Questionnaire	10
II.	METHODOLOGY	11
	Sample--Figure 1	11
	Instruments Used	11
	Pupil Opinion Questionnaire, Form B	12
	Other Measures	13
	Procedures	13
	Methods of Analysis	14
III.	FINDINGS AND ANALYSIS	15
	Hypotheses 1 and 2	15
	Correlations	16
	Hypotheses 5 and 6	18
	Tennessee Self-Concept Scale	19
IV.	CONCLUSIONS AND RECOMMENDATIONS	22
	Curriculum Considerations	22
	Holding the Dropout in School	23
	Attitude Shift	23
	Minority Youth	24
	Differences in Attitude Toward School	25
	Differences in Self-Concept	26
	Sex Differences in Self-Concept	26
	Implications	26
	REFERENCES	28
	APPENDIXES	32
	A. General Information Survey	32
	B. Pupil Opinion Questionnaire, Form A	34
	C. Pupil Opinion Questionnaire, Form B	35
	D. Attitudes Toward School: A Comparison	36

TABLES

No.		Page
1.	Comparative Standardization Means for the Pupil Opinion Questionnaire, Forms A and B.	13
2.	1970-71 Dropout Rate According to Curriculum Placement . .	15
3.	Intelligence Scores of Freshmen in Casa Grande Union High School as Measured by the Lorge-Thorndike Intelligence Scale	16
4.	Correlations among Tests for the Combined Groups . . .	17
5.	Means of Test Scores by Curriculum Placement	17
6.	A Comparison of Self-Concept of Potential Dropouts in Special Academic and Vocational Classes as Measured by the Tennessee Self-Concept Scale	20
7.	Significant Values of F for Comparing Tennessee Self-Concept Pre-test and Post-test Scores of Special Academic (N=43) and Vocational (N=83) Groups	21
8.	An Enrollment Analysis of Freshmen Students in the Casa Grande Union High School within Minority Groups According to Academic Program	22
9.	A Breakdown of Experimental and Control Students According to Ethnic Group	23
10.	Participation in School-Related Activities by Potential Dropouts as Compared to Students in the Regular Classroom	25

SUMMARY

Because of high dropout rates and high minority concentrations within the Casa Grande, Arizona Union High School District, a new program assigned to (a) hold students in school, and (b) shift attitudes toward school and self was incepted during the 1968-69 academic year. The special program focused on giving special consideration to core courses, English and math, in a team teaching situation. The teaching procedure could be characterized as one providing successful experiences and positive reinforcement conditions.

Formal evaluation of the program was carried on during the 1970-71 academic year. Classroom enrollments for the ninth grade this past year were 423 students which represented the following groups: (a) Anglo, 56.7%; (b) Mexican-American, 25.4%; (c) Indian, 12.2%; and (d) Black, 5.4%. Forty-three of these students were selected to participate in the special academic program and represented their ethnic groups accordingly: (a) Anglo, 30.6%; (b) Mexican-American, 39.4%; (c) Indian, 18.1%; and (d) Black, 11.9%. In respect to the first objective, holding power, the following statistics reveal the effectiveness of the program:

1. 6.9% of these students dropped out of school compared to 18% of the vocationally-placed students and 8.1% of the regular classroom students.

2. Absenteeism rate for the special academic group was 4.5% compared with 9.5% among the vocational students and 4% of the regular academic students.

With respect to the attitudes toward school it is interesting that when given an attitude toward school scale on a pre-test basis the special academic students had a mean of 76.3 compared to 75.9 for the vocational students and 78.2 for the regular classroom students. When given an alternate form attitude toward school scale as a post-text, the special students' mean was 77.4 compared to 74.3 for the vocational students and 75.1 for the regular classroom students. The covariance analysis indicates that the produced change in attitudes toward school is significant beyond the .01 level. The obtained F, with degrees of freedom 2 and 281 was 5.0. This indicates that differential changes in attitudes did occur.

It was questionable as to whether some type of self-concept measure would be capable of assessing attitude shift. Since self-concept is a more ingrained construct, what are the chances of these students increasing their own self-perception throughout the academic year? When given a pre-test, using the Tennessee Self-Concept Scale, the special academic group has a mean positive self-concept score of 38.7 (national norms n=50) while the post-test score was 44.1. This 5.4 point shift was significant at the .001 level of confidence, F being 13.4. In comparison the vocationally-placed students showed the same means throughout the year (40.0 on pre-test and 40.1 on post-test), therefore, showing no significant shift in self-concept.

I. BACKGROUND FOR THE STUDY

Purpose

The purpose of this study was to evaluate the attitudes toward self and school of high school freshmen who were diagnosed as potential dropouts. The high school freshmen enrolled in the Casa Grande, Arizona Union High School, which were placed in a special dropout prevention project participated in the study. All such youth were followed throughout their ninth grade year to ascertain the effectiveness of a special academic team teaching project upon (a) holding the students in school, and (b) effecting change in attitudes toward self and school.

The special dropout project in Casa Grande began during the 1968-69 academic year. The project evolved out of shared concern by administrators and interested faculty about the high dropout rate occurring within the school. Primarily the program was begun with three purposes in mind:

(a) To increase the rate of attendance of potential dropouts.
(b) To increase the holding power of potential dropouts.
(c) To increase positive attitude shift toward school among potential dropouts.

The project has just completed its third year and part of its success has resulted from the committment made by school personnel which effected a program geared to the academic and vocational needs of potential dropouts.

Potential dropouts in the Casa Grande Union High School have been placed in three different curriculum programs. First, there is annually around 45 percent of all freshmen considered to be potential dropouts. Most of these youth must, of necessity, be placed in the regular classroom with the regular academic student. Approximately 120 of these potential dropouts are placed in vocational education programs. Such programs consist of agricultural skills for the boys and home economic skills for the girls. In addition, approximately 45 students are placed in a special academic program as freshmen. This program focuses on the core subjects of English and mathematics.

The committment made by administrative personnel at Casa Grande, and the committment to special academic classes made by various classroom teachers have served to perpetuate the program which consists of positive goals. While it is crucial to maintain strong holding power among potential dropouts during the ninth grade, Casa Grande teachers have continued the program through all the high school years. The designated special curriculum at each grade level is:

(a) Ninth grade--English and mathematics
(b) Tenth grade--English and biology
(c) Eleventh grade--English and American history
(d) Twelfth grade--Social studies.

Students participating in the special program as sophomores, juniors, and seniors are those who have been retained through successive high school years. The criteria for selecting potential dropouts to the special program as ninth graders has been:

(1) Scores on the Academic Promise Test
(2) Intelligence Test Scores (Group)
(3) Eighth grade teacher appraisal of students
(4) Attendance records
(5) Academic grades
(6) Age
(7) Socio-economic status
(8) Racial-ethnic group

While it is important to evaluate the effectiveness of the special dropout program at each level, this project focused on grade nine youth. With sufficient data on these students, systematic research can be carried on throughout their academic high school history to tell more about the total effectiveness of holding potential dropouts in school. Specifically, this project allowed the investigator to:

(a) Assess the effectiveness of a special academic program in reducing absenteeism and holding potential dropouts in school.

(b) Assess potential dropout students attitudes toward school through administration of the Pupil Opinion Questionnaire, Form A.

(c) Develop an alternative form of the Pupil Opinion Questionnaire, herein known as Form B, for post-test administration.

(d) Assess potential dropout students attitudes toward self through administration of the Tennessee Self-Concept Scale.

(e) Assess the differences in absenteeism and holding power of potential dropouts in special academic classes as compared to vocationally-placed and regular academically-placed potential dropouts.

(f) Assess the attitudes toward school of potential dropouts in special academic classes as compared to vocationally and regular academically-placed potential dropouts.

(g) Assess the attitudes toward self of potential dropouts in special academic classes as compared to vocationally and regular academically-placed students.

Research Significance

This project was orginally conceived as being capable of providing needed descriptive and attitudinal data on students living in rural

Arizona which represents minority groups and are designated as potential dropouts. The research itself should provide: (a) additional information as to attitudes of potential dropouts toward school and self; (b) specific information to Casa Grande Union High School personnel about the effectiveness of their existing program in holding potential dropouts and effecting attitude change; (c) information as to the effectiveness of vocational education over regular academic programs as a means of holding students and effecting attitude change; (d) information as to the effectiveness of special programming in respect to specific minority groups, i.e., Indians, Mexican-Americans, and Blacks; (e) descriptive information generalizable to other rural communities in Southwestern United States which have similar dropout problems and high minority youth concentrations; and (f) data as to the effectiveness of the Pupil Opinion Questionnaire assessing student attitudes toward school and measuring change produced through special academic programming.

Results from the research has direct implications for Casa Grande Union High School personnel regarding: (a) the effectiveness of the existing program in terms of student holding power and attitude change; (b) the scope of the existing curriculum might be modified to better meet student needs as reflected in the research; and (c) teachers might see ways in which their attitudes toward the existing programs might be more effective in meeting the goals of the special programming.

Casa Grande Union High School is typical of many rural area schools across Southwestern Texas, New Mexico, Arizona, Utah, and California. The research findings reported here could leave implications for: (a) the application of the Casa Grande program to other schools having similarly defined dropout problems; (b) additional information as to the self-concept of minority youth; (c) the adequacy of the Tennessee Self-Concept Scale in assessing the self-concept of minority youth; (d) the ability of the Pupil Opinion Questionnaire, Forms A and B, in assessing the attitudes of minority youth toward school, and (e) the effectiveness of special academic programs over regular academic programs or vocational programs for holding potential dropouts in school.

Hypotheses:

The following considerations were basic to the study:

A. The effects of special academic programs will be to increase attendance rates and decrease dropout rates of potential dropouts placed in such programs as compared to the dropout rates prior to special academic program implementation.

B. To compare the effectiveness of special academic programs as a means of increasing attendance and reducing dropout rates with those potential dropouts placed in vocational programs or regular academic students.

The following null hypotheses were considered for this study:

1. There will be no significant difference among potential

dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Lorge-Thorndike Verbal Battery.

2. There will be no significant difference in intelligence among potential dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Lorge-Thorndike Nonverbal Battery.

3. There will be no correlation between intelligence and attitude toward school as measured by the Lorge-Thorndike Verbal Battery and the Pupil Opinion Questionnaire.

4. There will be no correlation between intelligence and attitude toward school as measured by the Lorge-Thorndike Nonverbal Battery and the Pupil Opinion Questionnaire.

5. There will be no significant difference in attitude toward school among potential dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Pupil Opinion Questionnaire, Form A (Pre-test).

6. There will be no significant difference in change scores on attitude toward school among potential dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Pupil Opinion Questionnaire, Form B (Post-test).

7. There will be no significant difference in attitude toward self among potential dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Tennessee Self-Concept Scale (pre-test).

8. There will be no significant difference in change scores on attitude toward self among potential dropouts placed in the regular academic classroom, vocationally-oriented classroom, or special academic classroom as measured by the Tennessee Self-Concept Scale (post-test).

Related Literature

Since the turn of the century, the quality of American public education has substantially improved. In spite of these gains there are still educational problems confronting our nation. One of the more crucial problems is the dropout. At the present time, one out of three fifth graders do not graduate from high school. Such dropouts are pupils who leave school for any reason other than death, prior to high school graduation and completion of program of studies without transferring to another school.

In contrast to public philosophy it is somewhat unrealistic to expect everyone to complete school. Schreiber (1969) states that the dropout is an inevitable fact in the educational process and will continue to be until such time as high school graduation becomes compulsory. Yet, a major problem to consider is the fact that our society into which the contemporary dropout seeks entrance has a diminishing place for him, a problem complicated by the related crises of the population boom, unemployment, technological evolution, and a rural to urban migration of disadvantaged minority.

Characteristics of the Dropout.

Potential school dropouts are not easily identified. Their varied patterns are not a simple compilation of educational factors but have social, psychological, economic, cultural and political ramifications which necessitate an understanding of the problem. Schreiber (1969) reports that the current dropout rate in the United States is about 35%. It is predicted that by 1975 the dropout rate will decrease to 30% and it will be down to 20% by the end of the century.

In spite of these facts, the unrealistic human potential as manifested by the dropout may be injurious to his psychological health and non-contributory to our society. The greatest number of dropouts leave school between the ages of 16 and $16\frac{1}{2}$. Most are over-age being in the ninth grade; with more male dropouts than females. Several reasons for dropping out of school are: (1) not interested in school, (2) preferred to work, (3) needed help to support home, (4) wanted to get married, or a girl becomes pregnant, and (5) wanted to enlist in the military service.

Cook (1956) hypothesized that differences between those that leave school and those who graduate could be found by examination of individual records. His conclusion indicated that there are measurable differences between withdrawal and non-withdrawal from school. In most cases, school withdrawal resulted from a multitude of factors operating together in such a way as to present to the individual student a seemingly insoluble problem. While poor academic success is known to be a continuous factor to dropouts, it is also true that most dropouts have low intelligence scores. Voss (1966) reported that 46% of the high school dropouts had an IQ score lower than 90. In contrast only 21% of the high school graduates had an IQ of less than 90. Still, 54% of the dropouts had an average or better IQ, therefore, one of the problems in this group of students dropping out may be a lack of appropriateness of existing curriculum.

In Hollingshead's study (1948) he found that 75% of children from the lowest social class had dropped out of school before they are 16 years of age. As recent as 1962, Pearl reports that one out of every three dropout families in Rochester, New York were on welfare. Bowman and Matthews (1960) found that 87.7% of the dropouts were in the lower class and while only 1.4% were in the upper and upper-middle classes. A study in Tucson (Young, 1954) revealed that a large number of the dropouts came from low income families, who lived in sub-standard conditions and belonged to a racial minority.

Cervantes (1965) reported that though the dropout rate among Negroes is twice as high as among whites, 80% of all dropouts were white. The dropout rate is higher in the South than in the North; higher among boys than girls; and higher in slums than in the suburbs.

Most dropout children were not only poor but had limited formal education. In a Maryland study (1963), 78% of the mothers and 80% of the fathers of dropouts had themselves never finished high school. This same study reported that 25% of the mothers and 30% of the fathers had not gone past the sixth grade. These trends have been substantiated in other studies (Nachman, 1963; Fifield, 1964; Gillingham, 1964).

Dropouts appear to be loners that are much more dissatisfied with their social relationships in school than high school graduates. A study in Modesto, California (Whitmore and Chapman, 1965) reported that the differences in self-concept between the dropout and the graduate are significant at the .01 level of confidence.

Dropouts often reject school and self and usually feel unsure about their school status. The dropout is less respected than other students by his teachers, usually considered a school social problem, often expresses hostility toward others, and his established defined goals.

Attitudes toward School

There is limited research available in which actual assessment of attitudes toward school by dropouts has been analyzed. However, many attitudes are reflected in reasons that dropouts cite for leaving school. In most cases leaving school has been associated with a lack of interest or a feeling of "not-belonging" within the school.

French (1969) found, in studying Pennsylvania high school students, that the major reason for both boys and girls leaving school was because they did not like it. Additional school-related reasons youth gave for leaving school were: (1) they were asked to leave, (2) they wanted to get a job, (3) they wanted to get married, or (4) they had failing grades.

A study of the Mexican-American population in Texas revealed the following school-related reasons for dropping out: (1) couldn't get along with teachers, (2) poor grades, (3) wasn't learning anything useful, (4) was asked to leave, or (5) other students didn't like me (Kuvelsky, et al., 1969; Wages, et al., 1969).

The Tucson (Arizona) School District #1 gives us a concrete action example. Following the release of the report of the Superintendent's Committee on Holding Power in 1968, the district conducted a more thorough dropout study than the annual reports they had been completing routinely since 1962. Within the district eight major reasons accounted for the dropout dilemma--the impact of underachievement, economic factors, a too demanding high school curriculum, lack of parental interest, negative student self-concepts, poor school-community relations, sub-par public transportation, and an inadequate work-study program. Action was

the next logical step. District personnel articulated and coordinated a program aimed at providing a better education for the potential dropout. For example, they established a more realistic curriculum for the non-English speaking child (one which enabled him to continue to use his native language in the classroom), allowed for more flexibility in grade placement (fewer retentions in grade), expanded the work-study program with the cooperation of employers, extended and supplemented the junior high and high school curricula, began more thorough in-service training sessions for staff working with children from deprived areas, and arranged for more busses for school children at a nominal expense to the rider. Dropout studies continue each year, and additional changes are implemented. During the 1968-69 academic year 843 Tucson students dropped out of school (4.77%). This figure does not include summer dropouts, however, or dropouts below grade nine, the inclusion of which number, of course, would furnish a clearer picture. The dropout rate was highest in the two Tucson high school with the largest number of students from poor socioeconomic environments. This finding appears consistent with other studies.

Sociocultural Factors in Self Concept

While there is much evidence in the literature pointing to the effects of sociocultural factors on the self concept, there would appear to be much contradiction regarding the extent and force with which these factors influence the individual. The research up to 1958 was filled with inconsistencies and contradictory results (Wylie, 1961b). However, since that time extensive continued research has brought forth further findings, the predominance of which indicates the major role of cultural influence. Kvaraceus (1965) and Deutsch (1965) declared that the inadequate view disadvantage children have of themselves is shaped by the reflected appraisals of society. Erikson (1950) suggest that social factors which do not permit a sense of basic trust lead to inadequate self concepts.

In studies involving the self concept of minority group students, Coleman (1966) found that the mean self concept of Mexican-American children was significantly lower than the mean self concepts of both Negro and Anglo children. McDaniel (1967) did not find this in his research; rather his findings indicated that the self concept of the Mexican-American child was significantly below that of the white child but not that of the Negro child. Studies by Keller (1963), Long and Henderson (1968), Henton (1964) and Taylor (1967) found a significantly higher self concept for white children.

Opposed to these findings, DeBlaissie and Healy (1970), Najmi (1963), and Carter (1968) found no significant difference in the self concept of Mexican-American and white children. Wylie (1963a), Gibby and Gabler (1967), Carpenter and Bussee (1969), Zirkel and Greene (1971), and Zirkel and Moses (1971) all found no indication of significant differences in self concept between the Negro and white students.

In mixed groups, it has been hypothesized that the internalization of negative perceptions of others is responsible for lower self concept

of the minority group child (Carter, 1968). Webster and Kroger (1966) conjectured that the self concept of the school child of minority groups is influenced by the majority group.

Sociocultural Factors in Attitude Toward School

Rohwer (1971) states that by virtue of impoverished pre-school experiences, the low socioeconomic status child enters school with a deficit in basic learning proficiencies and further postulated that there was a gross variance in opportunities to learn between ethnic groups. Wilson (1963) reported evidence that white children scored higher than black children on achievement test performance, and higher socioeconomic status children scored higher than lower socioeconomic status children. Rohwer, et al (1971) stated it was "undeniable" that there were different levels of school success in direct relationship to high and low status socioeconomic levels.

Young (1954) showed that a majority of the dropouts in Tucson, Arizona, came from low-income families who lived in substandard housing and belonged to a racial minority. Gillespie, as reported in Chapter 1, described the identifiable traits of the potential dropout as a very poor self image, strong feelings of frustration when faced with the regular academic program, and an almost total inability to communicate. Schreiber (1969) describes low scholastic aptitude as being one of the main characteristics of the potential dropout. Reyes (1969) found that youngsters of a mixed group with Spanish surnames more often dropped out of school than their peers.

Self-Concept and the Dropout.

Extensive work has been done with the self-concept of youth from minority or ethnic groups, many of whom are also dropouts from school. As such, there has been virtually no research designed to assess the self-concept of high school dropouts, although many characteristics could possibly be inferred from more general studies.

Many theorists have indicated that social and cultural factors play an extensive role in the development of the self-concept. Henton and Johnson (1964) noted that the self-concept of the child is directly related to his psychological environment, i.e., the sum total of stimulation that has impinged upon him from conception to the present time.

The self-concept develops out of a social definition of the individual's relationship to the world about him. As others important in his life evaluate the person, so he will come to evaluate himself. Kinch (1963) believed that the self-concept is the individual's conception of himself as it emerges from social interaction. The self-concept, in turn, guides the behavior of that individual.

The individual's behavior cannot legitimately be studied apart from the social context of the environment in which the individual lives. Thus, the development of a self concept is a process which must be examined

within a sociocultural setting. Carroll (1945) found that children from lower socioeconomic positions tend to aspire to ideals of personal beauty and fame, not to the moral and intellectual qualities characteristic of the middle class child. Thus, this finding would suggest difference in the self-concepts of these two classes. In addition, Hawk found that a child's socioeconomic status greatly influences his academic success which results in either a positive or negative self-concept (1967).

Brookover, et al., studies the relationship of self concept of ability to school achievement. They define "self-concept of ability" as "those definitions a student holds of his ability to achieve in academic tasks as compared to others (1965, p. 13)." In studying youth in grades 7-12 Brookover postulated that, among potentially successful students, academic achievement is artificially limited by the child's self-concept of his ability to achieve. Brookover argues that this inadequate self-concept is a consequence of perceived negative evaluations by significant others. Initial research (Brookover, et al., 1962) indicates that self concept of ability functions quite independently of measured intelligence in influencing academic adjustment, and is a better predictor of academic achievement. He also found that positive changes in evaluations by significant others' will raise the child's self-concept of ability and positively influence academic achievement.

In studying 400 children Deutsch (1967) found convincing evidence that Negro and white children who are from low socioeconomic environments often have low concepts of themselves. However, Deutsch found self-concepts generally more negative among the Negroes in the group. He suggests that success experience is the key to a positive view of the self. Deutsch feels that lower class children enter school so poorly prepared to produce what the school demands that initial failures are most inevitable, and the school experience becomes negatively rather than positively reinforced.

Williams and Byers (1968) studied the differences between Negro and white self esteem, using the Tennessee Self Concept Scale. Their findings indicated that the Negro sample exhibited significantly greater defensive distortions of their self description than did the white sample on the Defense-Positiveness Scale. In general, the results showed that the Negro adolescent is negative in self perception, quite defensive in his self description, and lacking a clear, consistent picture of himself.

Research With the Pupil Opinion Questionnaire

A major study among delinquents in Kansas City, Missouri was recently conducted by Alhstrom and Havighurst (1971) in which portions of the Pupil Opinion Questionnaire (the instrument being used in a current study in Casa Grande and included in the proposed study) was used. They found that 50% of the students expressed generally favorable attitudes toward school, 26% appeared indifferent, and 24% expressed negative attitudes toward school. In analyzing specific statements the following percentages of agreement were noted:

Too much nonsense goes on in school	65
School can be very boring at times	86
There's too much importance placed on grades	62
Most pupils learn what they have to learn, not what they want to learn	60
Pupils have to keep reading and studying the same old things over and over again	53
Teachers expect too much of pupils	61
Most pupils are not interested in learning	61
Teachers are too bossy	62
Teachers always seem to like some pupils better than others	74
Pupils do not have much freedom in school	63
Teachers really do not understand children	54

II. METHODOLOGY

Sample

The subjects consisted of 265 ninth grade students in the Casa Grande Union High School who had been designated by school officials as potential dropouts. The subjects were broken into an experimental group of 126 and a control group of 139. Experimental students were further divided into two groups: (a) 83 students were placed in the vocational program and (b) 43 students were placed in the special academic program. The 139 control students were enrolled in the regular academic curriculum at the school. Figure 1 depicts the design.

Figure 1

Experimental (126)		Control (139)	
(1) Vocational	83	(1) Regular classes	139
(2) Special Academic	43		

This design was used to compare the overall effects of the special programs at Casa Grande on the student body as a whole. Data from different groups within the school was analyzed to evaluate the differential effects of the various programs at Casa Grande.

Instruments Used

The following instruments were used in the project:

1. A general information survey (Appendix A)
2. The Tennessee Self-Concept Scale
3. The Lorge-Thorndike Intelligence Scale, Verbal and Non-verbal
4. The Pupil Opinion Questionnaire, Form A (Appendix B)
5. The Pupil Opinion Questionnaire, Form B (Appendix C)

The general information survey gathered demographic and personal data from each subject. This information was used to better analyze differences found according to externally-controlled variables.

The Tennessee Self-Concept Scale was standardized in 1957 and is generally used to give information about one's view of self in several dimensions. In addition to a general positive self-concept score, this scale also measures self-concept in relationship to (a) physical self, (b) moral-ethical self, (c) family self, (d) social self, and (e) personal self. Its repeated use with minority youth made it a logical choice for use within this study.

The Lorge-Thorndike Intelligence Scale is a group intelligence test designed to measure individual ability in the dimensions of verbal ability and performance ability. The testee is required to work with ideas and the relationship among ideas as expressed in both verbal symbols and pictorial, diagrammatic, and numerical symbols. More than 136,000 subjects representing all school levels and all population segments of the United States were used in the development of norms. Because norms represent all social, economic, educational, and intellectual levels, it was chosen for use in this study.

The Pupil Opinion Questionnaire, Form A, was orginally developed within a Youth Development Project in Wichita, Kansas (Havlicek and Bowman, 1966). It has since been used primarily in dropout projects in Kansas City, as well as being used within this study. Items were formulated on an a priori basis to tap four distinguishable components of attitudes toward school or attitudes toward four aspects of the school experience, namely, (a) teachers, (b) school in general, (c) school work, and (d) peers. A modified 4-point Likert Scale was used to collect data.

Pupil Opinion Questionnaire, Form B

One of the goals of this research project was to develop an alternate form of the Pupil Opinion Questionnaire to be administered as a post-test. Such a scale, consisting of 30 items was constructed to be a parallel form to Form A, the pre-test scale. It is included as Appendix C, and is herein known as Form B.

In order to establish reliability for the scale a sample outside the Casa Grande School district was sought. A comparable sample was found in Eloy, Arizona at the Santa Cruz Union High School. The test was given to 153 freshmen which represented Anglo, Mexican-American, Black, and Indian subcultures.

The Pupil Opinion Questionnaires, Form A and B were given to all Eloy freshmen in one sitting. Questions were alternated so that one form was not readily distinguishable from the other form. Means and standard deviations are presented in Table 1.

Table 1

Comparative Standardization Means for the
Pupil Opinion Questionnaire, Forms A and B

	Means	S. D.
Form A	77.6	12.5
Form B	75.9	10.2

In order to determine the reliability coefficient of the two forms a simple correlation was run with an obtained coefficient of .84. It is felt that this correlation is extremely high for an attitude measure and, thus, comparability of forms is contended.

Two independent variables were controlled in order to determine if the reliability coefficient was valid, that is, if attitude toward school, as measured by Forms A and B, was independent of any external variable. The mean intelligence for the Eloy sample, as determined by the Otis Quick-Scoring Mental Abilities Test, was 93.4. The correlation between intelligence and attitude toward school was -.01 for Form A and .07 for Form B. Therefore, it can be concluded that no significant relationship between intelligence and attitude toward school existed.

All Eloy freshmen were also given the California Reading Test, Form W. The average grade placement for these students was 8.16. This score correlated with Form A at .03 and Form B at .10. Since the test was given in the 8th year, 4th month, it can be assumed that low reading level was not a contributing factor to inability to take the test. As indicated by the correlation coefficients, no significant relationship between reading and attitude toward school existed.

Other Measures

In addition to the instruments designed for this study, other standardized test scores were available to the project if deemed necessary. They include: (a) scores on the Otis Quick-Scoring Mental Abilities Test, (b) scores on the Nelson-Denny Reading Test, (c) Scores on the Kelley-Greene Reading Comprehension Test, (d) scores on the Academic Promise Test.

Procedure

Upon enrolling to attend school in the Fall, 1970 all students in the experimental group were assigned to vocational or special academic classes. Control students received regular classroom assignments. Those that were selected for the vocational classes became involved in Home Economics for girls and Agriculture-Shop for boys. Special academic students were assigned to a team teaching classroom consisting of English

and mathematics under the supervision of Milford E. Gillespie, Head of the English Department.

During the first two weeks of school all students completed the general information survey. During the final week of September, 1970 the Tennessee Self-Concept Scale was administered to all students in the experimental group. The Scale was not given to freshmen in the control group because it was assumed that the national norms for the Tennessee Self-Concept Scale were based on the type of sample provided in the control group and therefore, comparability was assumed.

Within a five to ten day period after taking the Tennessee Self-Concept Scale, all students were given the Pupil Opinion Questionnaire, Form A. The Lorge-Thorndike Intelligence Test was given the first week in November, 1970.

Two variables were controlled which hopefully increased the validity of results. First, all tests were administered by qualified Casa Grande school personnel. Secondly, teacher attitude and committment toward special curricula for dropouts is a primary factor in both holding power and attitude. In order to control this variable, all students in the experimental group had the same instructors. In contrast control students were exposed to a variety of instructors.

Post-test data collection began the third week of April, 1971. The Tennessee Self-Concept Scale was given first. Then, following a five to ten day time lag, the Pupil Opinion Questionnaire, Form B was administered. Data collection procedures for the Spring were the same as in the Fall.

Methods of Analysis

The statistical analysis of the data consisted of several different techniques:

1. The student's t-test was run to determine if significant differences between mean intelligence scores existed as postulated in hypotheses 1 and 2.

2. Correlational methods, using the Pearson Produce Moment Correlation method, were employed to describe relationships among the variables. Hypotheses 3 and 4 were tested in this manner. Correlations indicated that the one-way analysis of variance planned for hypotheses 5 and 6 would be irrelevant because intelligence did not affect attitude score.

3. A Lindquist (1953) type 1 design was used to analyze change scores on the Tennessee Self-Concept Scale. Hypotheses 7 and 8 were tested in this way.

4. Analysis of covariance tested the difference in Pupil Opinion Questionnaire scores (hypotheses 5 and 6). A followup test

by Scheffe's multiple contrast technique was conducted when significance was found among the three means.

III. FINDINGS AND ANALYSIS

Two basic considerations of this study were to compare the 1970-71 dropout rate with rates of previous academic years and to compare the holding power of the special academic program as opposed to vocational programs and regular academic programs.

The special academic program was incepted during the 1968-1969 academic year. Upon completion of the first year, only 9.5 percent of the freshmen designated as high risk potential dropouts actually dropped out of school. This compares favorably with the 20% dropout rate among freshmen during the 1967-68 academic year as well as with the 12% total dropout rate for all freshmen during the 1968-69 year. The same picture was true in the 1969-1970 year. The 1970-71 academic year compares favorably and is analyzed by curriculum placement in Table 2.

Table 2

1970-71 Dropout Rate According to Curriculum Placement

	Dropouts	Absenteeism
Special Academic	9.3%	4.5%
Vocational Group	18.0	9.5
Control Group	10.0	4.0

Throughout the three-year period that the special academic curriculum has been made available to high risk potential dropouts the holding power has been much better than ever before, and in fact, is even better than vocational placement or regular academic student dropout rates. The absenteeism rate also compares favorably over the three year period. Such findings are highly supportive of the continuation and enlargement of special academic programming.

Hypotheses 1 and 2

The first two hypotheses were formulated in order to test for comparability of groups. It was hoped that there would be no significant differences in the mean intelligence of potential dropouts placed in the special academic group and those placed in the vocational classes. However, a difference between mean intelligence in the two experimental groups and the control group was expected. Table 3 presents the means of standard deviations of the three groups on both the verbal and nonverbal batteries of the Lorge-Thorndike Intelligence Scale.

Table 3

Intelligence Scores of Freshmen in Casa Grande Union High School as Measured by the Lorge-Thorndike Intelligence Scale

	Verbal		Non-Verbal	
	Mean	S.D.	Mean	S.D.
Total Sample (N=254)	91.3	12.6	96.8	14.0
Control (N=127)	96.7	12.3	101.0	14.2
Vocational (N=83)	85.7	10.2	93.6	11.5
Special Academic (N=43)	85.3	9.6	89.0	12.6

Table 3 indicates that there is no difference in the mean intelligence scores for students place in the special academic class and the vocational class. This is essentially confirming comparability of groups, therefore, one cannot say that intelligence differences is a contributing factor to holding power or attitude shift toward school and self.

The control group did have greater intelligence scores than either the special academic group or the vocational group. Their mean scores (96.7 verbal) and (101.0 non-verbal) compares favorably with the national norms of 100.

Correlations

Correlational methods were employed to study the relationship among the variables in the study. Table 4 reports the correlations of most interest.

The intelligence test scores show no significant correlation with either the Pupil Opinion Questionnaire or the Tennessee Self-Concept Scale. This means that the attitude tests are not typical scholastic tests wherein the "good" students score high because of ability to read. Such low correlations are essential if the attitude tests are of any valid use.

The correlations between the Pupil Opinionnaire and the Tennessee Self-Concept Scale indicate that self-concept is related to attitudes toward school. The correlation (r=.21) between the Pupil Opinion Questionnaire, Form A and the Tennessee Self-Concept Scale is lower than for Form B (r=.34) and the self-concept scale, probably due to the differential time periods between administration more than the changes in self-concept and attitude learning during the experimental period.

The correlation between the pre- and post-test Pupil Opinion Questionnaire score is a parallel forms reliability coefficient. However, it must be realized that, in addition to the normal changes in attitude

Table 4

Correlations Among Tests for the Combined Groups

Test	1 (N=254)	2 (N=252)	3 (N=246)	4 (N=236)	5 (N=238)
1. Lorge-Thorndike Verbal	xxx	.58	.08	-.02	.01
2. Lorge-Thorndike Nonverbal	.58	xxx	.03	-.02	-.02
3. Pupil Opinion Questionnaire Form A	.08	.03	xxx	.51	.21
4. Pupil Opinion Questionnaire Form B	-.02	-.02	.51	xxx	.34
5. Tennessee Self-Concept Scale	.01	-.02	.21	.34	xxx

Table 5

Means of Test Scores by Curriculum Placement

Group	Lorge-Thorndike				Pupil Opinion Questionnaire				Tennessee Self-Concept Scale	
	Verbal		Nonverbal		Pre-test		Post-test		Total	Positive
Special Academic (N=43)	85.3	9.6	89.0	12.6	78.0	11.8	77.4	9.3	44.1	9.5
Vocational (N=83)	85.7	10.2	93.6	11.5	77.6	12.3	74.3	9.0	40.1	9.4
Control (N=139)	96.7	12.3	101.0	14.2	79.9	14.0	75.1	11.1	40.6	9.5

occurring during an eight month period, the experimental conditions of the special academic group would operate to lower this coefficient. Therefore, the coefficient of .51 is lower than the parallel forms reliability coefficient described earlier in this paper when given to a comparable group of students at Eloy. Because the Eloy coefficient was .84, there is no reason to suspect the reliability coefficient of .51 found at Casa Grande. In fact, if the treatments of this experimental porgram were effective the coefficient must necessarily be lowered.

The correlations indicate that the attitude measures are indpendent of intelligence, and thus, hypotheses 3 and 4 are retained. Because IQ is shown to make no difference in attitude scores, hypotheses 1 and 2 are of no consequence. The entire outcome of the project, then, rests with hypotheses 5, 6, 7, and 8.

Hypotheses 5 and 6

Hypotheses 5 and 6 were tested together. An analysis of covariance was employed to adjust post-test scores on pre-test measures and then test the difference in post-test scores for significance. This, in effect, enables one to treat the data as though all groups were equal on pre-test measures. This design is legitimate where there is no ceiling effect of the test, and the regression plot within subgroups is homogeneous. These conditions were met in this study.

The covariance analysis indicates that the produced change in Pupil Opinion Questionnaire scores is significant beyond the .01 level. The obtained F with degrees of freedom 2 and 281, was 5.0. This indicates that differential changes in attitude did occur. An inspection of the adjusted means verifies that the mean for the special academic group was greater than the mean for either the vocational group or the control group. Scheffe's (Glass and Stanley, 1960) multiple comparison technique verified that the special academic group showed significantly greater positive changes in attitude toward school than did the other groups.

It may at first seem strange to talk about "greater positive change" when the post-test scores were actually lower than pre-test scores (See Table 5). Two known factors are relevant to this point. First, Form B of the Pupil Opinion Questionnaire, which was the post-test, consistently yield scores lower than Form A, the pre-test[1]. Second, students consistently indicate a more positive attitude toward school in the beginning of the school year than in the Spring. It is indeed surprising, that in

---

[1]In addition to the lower scores indicated in Table 5, the Eloy sample pre-test mean of 77.6 was 1.7 points higher than the post-test mean of 75.9. If adjustments were made to the Casa Grande sample the pre- and post-test means would be: (a) special academic group, 76.3 and 77.4; (b) vocational group, 75.9 and 74.3; and (c) control group, 78.2 and 75.1.

spite of these factors operating, the special academic groups score, without adjustment, were nearly equivalent for the Fall and Spring testing.

Tennessee Self-Concept Scale

The basic analysis for studying the difference between the vocational and special academic group, on the basis of the Tennessee Self-Concept Scale, was a two way analysis of variance repeated measures design. The program type was the between subjects factor and pre-test/post-test comparisons was the within subjects factor. This analysis has been called a Type I mixed design (Lindquist, 1953).

This analysis was executed for the twelve scores on the Tennessee Self-Concept Scale. The pre- and post-test means are shown in Table 6 and the significant factors are shown in Table 7. As the design is employed in this study, the value of interest is the interaction of groups by trials. Therefore, if the special academic program is successful, one expects to see a greater positive change in attitude of these students than in the vocational group. Seven of the interactions were significant, thus indicating that the expected change did occur. An examination of all means (Table 6) indicates that all seven of the significant interactions listed in Table 7 were the result of greater positive change in self-concept in the special academic group.

Hypothesis 7 postulated that there would be no significant differences on the basis of pre-test administration between the special academic group and the vocational group on self-concept. The analysis produced no evidence of group differences in self-concept at the beginning of the study, therefore, hypothesis 7 is retained.

Hypothesis 8 was stated in the null form but rejected because of the overwhelming evidence shown in Table 7 as to levels of significance. An alternative hypothesis, that the special academic group showed greater positive growth in self-concept, as measured by the Tennessee Self-Concept Scale, must be accepted.

While the total Positive score is the single most important score on the Tennessee Self-Concept Scale, the groups by trials interaction effect yielded F's for all the subscales on the test. The Identity subscale is a measure of how the individual sees himself. The post-test mean (43.6) exceeded the pre-test mean (37.7) by 5.9 points which yielded a F score of 10.4, significant at the .002 level. The Moral-Ethical subscale is the individual's evaluation of his personal satisfaction with his religion or lack of it and his feelings of being a "good" or "bad" person. Because of high minority concentrations (Mexican-American and Indians) and their particular religious beliefs, it is questionable that this scale is capable of yielding a valid measure of moral-ethical character. Nevertheless, a significant shift in moral-ethical attitude was experienced within the special academic group throughout the year. The pre-test mean was 36.5 and the post-test mean was 41.5 which produced a F of 4.9, significant at the .05 level. The Personal self score is a measure of one's evaluation of his personality apart from his body or his

Table 6

A Comparison of Self-Concept of Potential Dropouts in Special Academic and Vocational Classes as Measured by the Tennessee Self-Concept Scale[1]

Variable	Group	Pre-test Mean	Post-test Mean
1.	Special Academic	47.3	47.9
	Vocational	46.6	46.5
2.	Special Academic	38.7	44.1
	Vocational	40.0	40.1
3.	Special Academic	37.7	43.6
	Vocational	38.5	39.8
4.	Special Academic	44.2	48.2
	Vocational	44.7	44.3
5.	Special Academic	36.7	40.7
	Vocational	38.7	38.4
6.	Special Academic	42.7	46.3
	Vocational	45.2	44.7
7.	Special Academic	36.5	41.5
	Vocational	36.1	36.0
8.	Special Academic	45.4	49.8
	Vocational	45.9	46.7
9.	Special Academic	36.7	41.1
	Vocational	39.7	39.7
10.	Special Academic	42.0	45.2
	Vocational	40.7	40.7
11.	Special Academic	51.8	47.3
	Vocational	51.3	50.4
12.	Special Academic	43.8	43.5
	Vocational	47.0	44.0

[1]National norms on all subscales are expressed as T-scores, M=50, S.D.=10

Table 7

Significant Values of F for Comparing Tennessee Self-Concept Pre-test and Post-test scores of Special Academic (N=43) and Vocational (N=83) Groups

Factors	df	Self-Criticism 1	Total Positive 2	Identity 3	Self-Satisfaction 4	Behavior 5	Physical Self 6	Moral-Ethical Self 7	Personal Self 8	Family Self 9	Social Self 10	Variability 11	Distribution 12
Groups (G)	1, 98												
Trials (T)	1, 98	8.5[a]	10.4[c]					4.9[h]	3.9[j]			4.1[l]	3.6[m]
G x T	1, 98	13.4[b]	5.7[d]	6.4[e]	5.4[f]	4.8[g]	9.1[i]		5.4[k]				

Probability Levels

a - .005
b - .001
c - .002
d - .01
e - .01
f - .02
g - .05
h - .05
i - .005
j - .05
k - .02
l - .05
m - .05

relationship with others. The .05 level was exceeded by an obtained F of 3.9 with comparative means being 45.4 (pre-test) and 49.8 (post-test).

In addition to these reported significant change scores Table 7 also shows that the special academic group exceeded the vocationally-placed students in the subscales of self-satisfaction, behavior, physical self, and family self.

IV. CONCLUSIONS AND RECOMMENDATIONS

Curriculum Considerations

One of the primary reasons this special program was initially incepted was to create curriculum options for high concentrations of minority youth that were low achievers and extremely high risk potential dropouts. An analysis of the 1970-71 ninth grade enrollment is shown in Table 8. It is evident by looking at this table that Anglo students

Table 8

An Enrollment Analysis of Freshmen Students in the Casa Grande Union High School within Minority Groups According to Academic Program

Group	Special Academic	Vocational Classes	Regular Classroom
White (N=250)	5.2%	12.8	82.0
Mexican-American (N=112)	15.2	51.8	33.0
Indian (N=54)	13.0	40.7	46.3
Black (N=24)	25.0	54.2	20.8

represented the majority enrollment in the ninth grade. Mexican-American, Indian, and Black students have inordinate numbers of students in the vocational and special academic classes compared to the regular classroom and their Anglo counterparts.

Another way of looking at the enrollment was by breaking down the groups ethnically. Table 9 indicates what percentage of students were in each ethnic group. As can be seen by the table the three combined minority groups do make up most of the membership in both the special academic and vocational classes. In contrast, Anglo's constituted most of the control group (Thornburg, 1971b).

Table 9

A Breakdown of Experimental and Control Students According to Ethnic Group

Group	Special Academic		Vocational Classes		Control Group	
Mexican-American	17	39.6%	33	40.0%	19	13.6%
Anglo	13	30.2	25	30.0	104	75.1
Indian	7	16.2	16	19.3	13	9.1
Black	6	14.0	9	10.7	3	1.8

Holding the Dropout in School

The project clearly indicates that the special academic program is effective in holding students in school. When one compares the 9.3% dropout rate with the vocational students and the regular classroom students, it not only compares favorably, but is less than either other type of curriculum program.

Investigation of Tables 8 and 9 clearly indicate that, while this special program was effective in reducing the dropout rate, it did so with high minority concentrations. The variable of race is not one to be taken lightly. Repeated studies indicate that members of minority groups are more likely to drop out of school than Anglo students. In addition, the history of dropouts in the Casa Grande, Arizona Union High School also reflects a much higher incident of dropouts among minority members than among Anglo. It can be concluded, unequivocally, that this program is effective in reducing the dropout rate over being placed in vocationaly-oriented classes or the regular academic classroom.

Attitude Shift

The project conclusively indicated that a special academic environment was instrumental in producing a more positive attitude toward self and school throughout the academic year. It is quite possible that a normal deterioration in attitude toward school could occur throughout the academic year. Research studies among dropout and non-dropout populations have demonstrated this. Yet, in the Casa Grande program a growth in attitude toward school was evidenced among high risk dropouts while vocationally-placed and regular academic students showed a drop in attitude toward school. Since the positive change exceeded the level of significant difference, it can be concluded that the program is an effective means of producing positive attitude shift.

Similar findings occurred in the project regarding self-concept. Although the self-concept is more complex, and is affected by factors not within the domain of the school, it is somewhat surprising that any significant change in self-concept occurred. In this case, significant at the .001 level of confidence again attests to the effectiveness of the

program in creating a more positive and stimulating enrironment for the potential dropout. The study also shows that vocationally-placed and regular academic students did not make significant gains in self-concept, and, in fact, had lower self-concepts at the end of the academic year than those students who were in the special academic classes.

Minority Youth

The design of the study was to ascertain the effectiveness of varied instructional programs on holding power and attitude shift among different segments of the school population. As is often the case, the majority of the potential dropouts, whether vocationally placed or special academically placed, came from three minority groups, Mexican-American, Indian, and Black.

Analysis of the home environment and family background of these three groups revealed the following general characteristics: (a) the majority of youth from all three ethnic groups lived with both biological parents, although the diversity of parental structures was greater among Mexican-American and Blacks than Indians; (b) number of children in the home was excessive, Mexican-American (6.2), Indian (5.5), and Black (8.2); (c) Black and Indian father's education represented all levels of final attainment from less than the sixth grade through college graduates. Low education was much more severe with the Mexican-American group as 66% of the fathers had less than a sixth grade education; (d) the same trend existed among the three groups for mother's education as did for father's education; (e) skilled, semi-skilled, and unskilled classifications represented over 80% of the father's occupations among all ethnic groups; and (f) most mothers stayed in the home with approximately 33% from each minority group represented in the working class.

It has often been hypothesized that Anglo students have particular advantages in a school environment that is not afforded minority member youth. If this is the case, it certainly was not borne out within the research study just completed among Casa Grande youth. Students were asked to indicate their participation in school-related activities that were not part of the regular academic programming. The results of the survey are shown in Table 10.

Two levels of student participation require minimal effort on the part of the student and little committment to the student on the part of the school. These areas are attendance at athletic events and at school dances. The majority of youth attended these events. One noticeable exception was the negligible percentage of Indian youth who attended school dances, a factor that was undoubtedly influenced by their culture. In contrast to these two areas, a lessening percentage of students belonged to school clubs or participated in special activities, such as, class officers, sports, glee club, band, chorus, etc. In the case of the latter two categories, a greater committment of both student and faculty time are required.

These findings suggest two or three possibilities. First, if Table 10 is a good indication of the social environment behavior of Casa Grande students then it is clear that minority youth are not being put at any

Table 10

Participation in School-Related Activities by Potential Dropouts as Compared to Students in the Regular Classroom

Question	Mexican-American (N=50)[2]	Anglo (N=39)	Indian (N=23)	Black (N=15)	Dropout Total (N=127)		Control Group[1] (N=127)	
					N	%	N	%
Attend Athletic Events								
Yes	43	28	14	14	99	82.5	92	77.3
No	6	5	9	1	21	17.5	27	22.7
Attend High School Dances								
Yes	27	22	4	12	65	53.7	56	47.1
No	21	13	19	3	56	46.3	63	52.9
Belong to School Clubs								
Yes	13	14	11	7	45	37.5	60	48.4
No	34	21	12	8	75	62.5	64	51.6
Participate in Special Activities								
Yes	10	16	5	2	33	27.7	34	29.6
No	36	19	18	13	86	72.3	81	70.4

[1]The control group consisted of 24 Mexican-American, 78 Anglo, 20 Indian, and 5 Black students.

[2]These N's represent the possible total in each category, although in some cases not all subjects responded.

particular disadvantage. Second, the low incidence of participation in school clubs and activities could be a result of a lack of desire to commit one's self beyond the actual classroom or could be attributed to the perceived irrelevancy of clubs and activities to the students. Third, these results leave implications for further research, not only within this school environment, but beyond the scope of it to see just how much effect the total school environment has on holding students and increasing positive attitude shift.

Differences in Attitude Toward School

Analysis of data on the self-concept revealed the opposite picture that attitude toward school revealed. Black students placed in the special academic classroom had a more positive self-concept than their Mexican-American and Indian counterparts. In addition, their positive self-concept score of 51.4 exceeded the self-concept score for all vocationally-placed students and the regular academic students. Mexican-American and Indian youth had lower self concepts, but, still greater than those placed in the vocational classroom.

What factors cause the Indian students to have the best attitude toward school but the lowest self-concept, while Black students have the lowest attitude toward school, but highest self-concept? This report cannot offer any definite conclusions but does conjecture two possibilities: (1) Perhaps Indian youth have a more distinct and identifiable culture than Blacks, and therefore, are better able to adjust to the school environment, although their home environment does not produce the affects required to score well on self-concept. (2) Perhaps Black students are more concerned about working into the mainstream of American society. The national urge by Black leaders and Black movements allows these students to have something greater than their immediate social-cultural milieu with which to identify, thus, the self-concept is enhanced, although, they might find that their school environment is not conducive to their adjustment, thus, negative attitudes toward school exist. Continued research may change these conjectures into tenable hypotheses.

Sex Differences in Self-Concept

This study did not reveal any significant differences in attitude toward school or total positive self-concept between males and females. Two subscales on the Tennessee Self-Concept Scale did indicate that males had a better evaluation of their personality and their worth as a family member than did females. It is possible that the home-school forces that shape the attitudinal systems of both male and female are comparable among minority group members.

Implications

Concisely, the implications of this study for further research focus on the following areas:

1. Additional attitude toward school instruments could be used in order to confirm the results of this study.

2. Such students should be followed throughout their entire high school experiences to determine long-range effectiveness of special academic programming.

3. Experimental conditions could be established where students in special programming for one year were put back into the regular classroom to determine the effectiveness of special academic programs in terms of holding power.

4. Ways to provide special academic instruction for more potential dropouts as a way of holding students in school should be sought.

5. The advisability of placing potential dropouts in vocational classes is in question unless special vocational classes are created in the same sense that special academic classes were.

6. Teacher training programs for equipping teachers with skills and insights for this type of student is much needed as the

success of such a program inevitably falls back on the teacher.

7. Ways of evaluating the individual needs systems of each student must be researched and implemented in order to establish strong holding power.

REFERENCES

Ahlstrom, W. M. and Havighurst, R.M. 400 Losers San Francisco: Jossey, Bass, 1971.

Bowman, P.H. and Matthews, C.V. Motivator of youth for leaving school. USOE Cooperative Research Project No. 200, University of Chicago Press, 1960.

Brookover, W., et al. Improving academic achievement through student's self-concept enhancement. Final Report of Cooperative Research Project No. 1636, U.S. Office of Education. East Lansing: Bureau of Educational Research Services, College of Education, Michigan State University Press, 1965.

Brookover, W., et al. Self-concept of ability and school achievement. Final Report of Cooperative Research Project No. 845, U.S. Office of Education. East Lansing: Bureau of Research and Publications, College of Education, Michigan State University Press, 1962.

Carpenter, R. R. and Busse, T. B. Development of self-concept in Negro and white children. Child Development. 1969, 40, 935-939.

Carroll, R. E. Relation of school environment to the moral ideology and personal aspiration of Negro boys and girls. School Review, 1945, 53, 30-38.

Carter, R. Negative self-concept of Mexican-American students. School and Society, 1968, 96, 217-219.

Cervantes, L. The dropout: causes and cures. Ann Arbor: University of Michigan Press, 1965.

Coleman, et. al. Equality of educational opportunity. Washington, D.C.: Government Printing Office, 1966.

Cook, E. S., Jr. An analysis of factors related to withdrawal from high school prior to graduation. Journal of Educational Research, 1956, 50, 191-196.

Cummings, R. and Gillespie, M.E. Dropouts among the disadvantaged. Arizona Teacher, 1971, 59, 21, 29.

DeBlaissie, R.R. and Healy, G.W. Self-concept: A comparison of Spanish-American, Negro, and Anglo adolescents across ethnic, sex, and socio-economic variables. Las Cruces, N.M.: ERIC Clearinghouse on Rural Education and Small Schools, 1970.

Deutsch, M. Some psychological aspects of learning in the disadvantaged. In Torrance, E.P. & Strom, R.D. (Eds.) Mental health and achievement. New York: John Wiley, 1965, pp. 320-326.

Deutsch, M. Minority groups and class status as related to social and personality factors in scholastic achievement. In Deutsch (ed.) The disadvantaged child. New York: Basic Books, 1967.

Erikson, E. H. Childhood and society. New York: W.W. Norton, 1950.

Fifield, M. Pocatello, Idaho, dropout study, 1963. Pocatello Board of Education, 1964 (mimeographed).

French, J.L. Characteristics of high ability dropouts. Bulletin of the National Association of Secondary School Principals, 1969, 53, 67-69

Gibby, R. G. Sr. and Gabler, R. The self-concept of Negro and white children. Journal of Clinical Psychology, 1967, 144-148.

Gillingham, J. A study of dropouts in Dade County, Florida, Public Schools, 1960-63. Dade County, Fla.: Department of Research, 1964.

Glass, G. V. and Stanley, J.C. Statistical methods in education and psychology. New York: Prentice-Hall, 1969.

Havlicek, L. and Bowman, J. Pupil Opinion Questionnaire. Unpublished study, 1966.

Hawk, T.L. Self concepts of the socially disadvantaged. Elementary School Journal, 1967, 67, 196-206.

Healey, G. W. Self concept: A comparison of Negro-, Anglo, and Spanish-American students across ethnic, sex, and sociometric variables. Unpublished doctoral dissertation, New Mexico State University, 1969.

Henton, C.L. and Johnson, E.E. Relationship between self concepts of Negro elementary children and their academic achievement, intelligence, interests and manifest anxiety. Washington, D.C.: Government Printing Office, U.S. Office of Health, Education, and Welfare, Cooperative Research Project No. 1542, 1964.

High school dropout study. Tucson: Department of Pupil Personnel Services, Tucson Public Schools, 1969.

Hollingshead, A. B. Elmstown's youth. New York: Wiley, 1949.

Keller, S. The social world of urban slum child: Some preliminary findings. American Journal of Orthopsychiatry, 1963, 823-831.

Kinch, J.W. Formalized theory: The self concept. American Journal of Sociology, 1963, 68, 481-486.

Kuvelsky, W.P., Wright, D.E., and Juarez, R.Z. Status projections and ethnicity: A comparison of Mexican-American, Negro and Anglo youth. Unpublished paper read at the Southwestern Sociological Association meeting, April, 1969.

Kvaraceus, W. C. (Ed.) Negro self concept. New York: McGraw-Hill, 1965.

Lindquist, E.F. Design and analysis of experiments in psychology and education. Boston: Houghton-Mifflin, 1953

Long, B.H. and Henderson, E.H. Self-social concepts of disadvantaged school beginners. Journal of Genetic Psychology, 1968, 113, 41-51.

Nachman, L.R., et al. Pilot study of Ohio high school dropouts, 1961-62. Columbus: Ohio State Department of Education, 1963.

Najmi, M.A.K. Comparison of Greeley's Spanish-American and Anglo-white elementary school children's responses to instruments designed to measure self-concepts and some related variables. Unpublished doctoral dissertation, Colorado State College, 1962.

Our Dropouts: What can schools do? Baltimore: Maryland State Department of Education, 1963.

Pearl, A. The school dropout problem, Rochester, Part I. Albany: New York State Division for Youth, 1962.

Rohwer, W.D. and Levin, J.R. Elaboration preferences and differences in learning proficiency. In J. Hellmuth (ed.) Cognitive Studies. Vol. 2. New York: Brunner/Mazel, 1971.

Rohwer, W.D., et. al. Population differences and learning proficiency. Journal of Educational Psychology, 1971, in press.

Schreiber, D. Dropout, causes and consequences. In Ebel, R. (ed.) Encyclopedia of Educational Research (4th ed.). Chicago: Macmillan 1969.

Taylor, C.P. Some changes in self concept in the first year of desegregated schooling: The outward walls and the inward scars. Unpublished doctoral dissertation, University of Delaware, 1967.

Thornburg, H.D. Minority youth families: A comparative analysis of attitude between self and family. Paper read at the Southwestern Division meeting, AAAS, Tempe, Arizona, April, 1971.

Thornburg, H.D. Learning relevancy: Psychological analysis of an experimental program for potential minority group dropouts. Paper read at the annual meeting of the Southwestern Psychological Association, San Antonio, April, 1971.

Thornburg, H.D. Minority youth dropouts: Indians, Blacks, and Mexican-Americans. Paper read at the Pacific Division Meeting, AAAS, San Diego, June, 1971.

Thornburg, H.D. and Gillespie, M.E. Learning relevancy: Psychological analysis of an experimental program for potential minority youth dropouts. Clearing House, 1971, in press.

Wages, S., Thomas, K., and Kuvelsky, W.P. Mexican American teen-age school dropouts: Reasons for leaving school and orientations toward subsequent educational attainment. Unpublished paper read at the Southwestern Sociological Association meeting, April, 1969.

Webster, S. and Kroger, M.D. A comparative study of selected perceptions and feelings of Negro adolescents with and without white friends in integrated urban high schools. Journal of Negro Education. 1965, 35, 55.

Whitmore, P.M. and Chapman, P.W. Dropout incidence and signficance at Modesto High Schools, 1964-65. Modesto, Calif.: Modesto Public Schools, 1965 (mimmeographed).

Williams, R.L. and Byers, H. Negro self esteem in a transitional society: Tennessee Self Concept Scale. Personnel and Guidance Journal, 1968, 46, 120-125.

Wilson, A.B. Educational consequences of segregation in a California community. In Racial isolation in public schools: A report of the U.S. Commission on Civil Rights. Washington, D.C.: Government Printing Office, 1967.

Wylie, R.C. The self concept. Lincoln: University of Nebraska Press, 1961.

Wylie, R.C. The self concept: A critical survey of pertinent research literature. Lincoln: University of Nebraska Press, 1961.

Young, J. Lost, strayed or stolen. Clearing House, 1954, 29, 82-92.

Zirkel, P.A. and Greene, J.F. The measurement of the self-concept of disadvantaged students. Paper read at the annual meeting of the National Council of Measurement in Education, New York, February, 1971.

Zirkel, P.A. and Moses, E.G. Self-concept and ethnic group membership among public school students. American Educational Research Journal. 1971, in press.

APPENDIX A

GENERAL INFORMATION SURVEY

1. Name_____
2. Age_____
3. Male_____ Female_____
4. Background
   a. Mexican-American
   b. Indian
   c. Black
   d. White
   e. Oriental
5. What adults live in your home?_____
   _____
6. How many children are in your family?_____
7. Father's Occupation
   a. Rancher
   b. Farmer
   c. Farm Laborer
   d. Miner
   e. Mechanic
   f. Military
   g. Skilled
   h. Unskilled
   i. Businessman
   j. Professional
   k. Unemployed
   l. Other_____
8. Father's Education
   a. 6th grade or less
   b. 7th or 8th grade
   c. 9th or 10th grade
   d. 11th grade
   e. High school graduate
   f. Some college
   g. Vocational school
   h. College graduate
   i. Other_____
9. Mother's Education
   a. 6th grade or less
   b. 7th or 8th grade
   c. 9th or 10th grade
   d. 11th grade
   e. High school graduate
   f. Some college
   g. Vocational school
   h. College graduate
   i. Other_____

10. Does your mother work? If so, what kind of job is it?_____
_____

11. Do you attend high school sport activities? Yes_____ No_____
12. Do you attend school dances? Yes_____ No_____
13. What high school clubs or sports do you participate in?_____
_____
_____

APPENDIX B

PUPIL OPINION QUESTIONNAIRE, FORM A

Darken the space between the lines on the answer sheet under A, B, C, and D depending on how you feel in each case. Mark all of your answers on the answer sheet.

A. I agree very much.
B. I agree a little.
C. I disagree a little.
D. I disagree very much.

1. Most things about school are all right.
2. Most of my classes are enjoyable.
e. Pupils who do not do their daily lessons should be kept after school to do them.
4. Most teachers are crabby.
5. We seem to be doing the "same old things" over and over again in school.
6. It is easy to get along with most teachers.
7. As a rule, teachers want too much work from pupils.
8. Going to school is too difficult and discouraging.
9. Most of the things which the teacher does are all right.
10. Teachers are usually too busy to talk with pupils.
11. Teachers require too much reading.
12. Most teachers try to force pupils to learn something.
13. Pupils really do not learn the things in school that they want to learn.
14. A pupil should do more school work than he has to do.
15. Everything in school is too strict.
16. Most pupils are afraid of their teachers.
17. Too much of what we have to study does not make sense.
18. It is hard to make friends in school.
19. Pupils have to keep reading and studying the same things over and over in school.
20. My daily school work is full of things that keep me interested.
21. Teachers care about what is good for pupils.
22. Teachers pick on some pupils for no reason at all.
23. Pupils are always treated fairly in school.
24. In most school groups, there are only one or two pupils who are important.
25. Most pupils feel that they can trust their teachers.
26. Teachers expect too much of pupils.
27. School can be very boring at times.
28. Some pupils are always making fun of other pupils in school.
29. There is too much importance placed on grades in school.
30. Teachers always seem to like some pupils better than others.

APPENDIX C

PUPIL OPINION QUESTIONNAIRE, FORM B

Darken the space between the lines on the answer sheet under A, B, C, and D depending on how you feel in each case. Mark all of your answers on the answer sheet.

A. I agree very much.
B. I agree a little.
C. I disagree a little.
D. I disagree very much.

1. Pupils' fear of teachers is common.
2. Much of what we study in school appears worthless.
3. School is a place to make new friends.
4. School never seems to change. We study the same old things day after day.
5. School is never very exciting.
6. Teachers are concerned with the well-being of their pupils.
7. Teachers find fault with some pupils without reason.
8. Most pupils receive fair treatment in schools.
9. The same few pupils are important in most school groups.
10. Teachers are found to be trustworthy by most of their pupils.
11. A pupil can seldom satisfy the teacher.
12. Sometimes school is not very interesting.
13. Some pupils do not treat other pupils fairly.
14. Grades mean too much to people.
15. Teachers always have some favorite pupils.
16. School is not really that bad.
17. I dislike most of the things I study in school.
18. It is right to keep pupils after school to finish their work.
19. Not many teachers are grouchy.
20. We seem to be doing new things in school.
21. Most teachers are hard to get along with.
22. Generally, teachers do not expect enough work from students.
23. Going to school is hard, but not discouraging.
24. Teachers often make mistakes.
25. Teachers usually have some time to spend with students.
26. Teachers require more reading than is necessary.
27. Most teachers demand that students learn certain things.
28. Pupils are expected to learn about things that do not interest them.
29. Pupils should not be required to do more work than they want to do.
30. Schools have too many rules.

APPENDIX D

Attitudes Toward School:
A Comparison

Selected statement reflecting attitude toward school are reported in a recent study of dropouts in Kansas City, Missouri conducted by Alhstrom and Havighurst, reported in 400 Losers. A comparison of those findings and the findings of this study are reported.

Statement	Percent Agreement	
	This Study	K.C. Study
Pupils really do not learn the things in school that they want to learn.	62	60
Too much of what we have to study does not make sense.	49	47
Pupils have to keep reading and studying the same things over and over in school.	48	53
Pupils are always treated fairly in school.	63	49
Teachers expect too much of students.	58	61
School can be very boring at times.	83	86
Some pupils are always making fun of other pupils in school.	83	91
There is too much importance placed on grades in school.	74	62
Teachers always seem to like some pupils better than others.	82	74